TDMHSAS BEST PRACTICE GUIDELINES

Mood Disorders in Children and Adolescents

(<u>NOTE</u>: The new DSM-5 will split the Mood Disorders chapter into two sections: Depressive Disorders and Bipolar and Related Disorders [Bradley, n.d.].)

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Mood disorders include a range of moods from simple sadness to major manic excitement. Major Depressive Disorder (MDD) and Dysthymic Disorder (DD) are the most common mood disorders affecting children and adolescents, though Bipolar Disorder (BD) is on the rise (Kennedy, 2004; Merikangas, & Pato, 2009; Youngstrom, 2006). In fact, BD is emerging as the typical diagnosis in children under the age of 12 receiving psychiatric hospitalization (Youngstrom, 2006). Further, the increase in BD diagnoses in young people substantially outpaces diagnostic increases among adults. (Researchers are still cautious in their interpretation of this finding [NIMH, 2007]. Using the DSM-IV-TR, children and adolescents can be diagnosed with MDD, Dysthymia, Adjustment disorders, Depression Not Otherwise Specified (DNOS), and BD, hypomania, and cyclothymia. MDD and BD are less common before puberty, and typically emerge during adolescence (Kennedy, 2004; Fraser-Thill, n.d.). Some estimate that nearly 20 percent of youth experience a mood disorder prior to age 18 years (Kennedy, 2004).

A recent review reported that the incidence of the first onset of a major depressive episode (MDE) is lower in childhood compared to other age periods and higher in early adulthood as compared to adulthood; recurrence is lower during childhood than other age periods, which do not differ from each other; being female predicts first-incident MDD in childhood through adulthood, but is not associated with recurrence, and suicide attempt rates are significantly higher during adolescence than during either emerging adulthood or adulthood (Rohde, Lewinsohn, Klein, Seeley, & Gau, 2012). The prevalence of Dysthymic Disorder has been reported to be about 0.6-1.7 percent in children and 1.6-8.0 percent in adolescents (Turgay, 2005). SAMHSA's National Survey on Drug Use and Health (NSDUHs) based on 2009-2010 data indicates that 8.3 percent of Tennessee youth between 12-17 years of age experienced at least one MDE during the previous year (SAMHSA/NSDUH, 2012). Finally, early-onset depression often persists, recurs, and continues into adulthood, and may predict more serious mental illness in adult life (National Institute of Mental Health [NIMH], 2007).

Diagnosing Bipolar Disorder (BD) is rare and complex in children under age 10 due to the overlap with other childhood disorders (Carlson, 2012), particularly Attention Deficit Hyperactivity Disorder (ADHD) (Galanter & Leibenluft, 2008). Bipolar disorder occurs at about

the same frequency for males and females (Kennedy, 2004). For both males and females, the highest rates of onset for pediatric bipolar disorder occur between the ages of 15 and 19 (Lansford, 2004). Approximately 10 percent to 25 percent of teens hospitalized for first psychotic episodes have a diagnosis of bipolar I disorder (Carlson, Naz, & Bromet, 2005).

DSM-IV-TR Criteria for Depressive Disorders

(<u>NOTE</u>: The new DSM-5 will split the Mood Disorders chapter into two sections: Depressive Disorders and Bipolar and Related Disorders [Bradley, n.d.].)

Prior to diagnosis of a specific mood disorder, criteria must be met for a mood episode. The mood episode might be a major depressive episode and/or a manic episode (DSM-IV-TR, 2000).

Major Depressive Episode

- At least five of the following symptoms have been present during the same two-week period and represent a change from previous functioning; one or more of the symptoms is either 1) depressed/irritable mood or 2) loss of interest or pleasure.
 - Depressed mood most of the day, nearly every day and based on self report or observations made by others. **Note: Youth may manifest an irritable mood**.
 - Markedly diminished interest or pleasure in almost all activities nearly every day for most of the day.
 - Significant weight loss (*when not on a diet*) or gain, or change in appetite nearly every day. **Note: Consider when the youth fails to make expected weight gains.**
 - Hypersomnia or insomnia nearly every day.
 - Psychomotor retardation or agitation nearly every day (as observed by others, not just subjective feelings of being slowed down or restlessness).
 - Loss of energy or fatigue nearly every day.
 - Feelings of inappropriate or excessive guilt (which may be delusional) or worthlessness nearly every day (not merely guilt or self-reproach about being sick).
 - Diminished ability to concentrate, think, or make decisions nearly every day (either as observed by others or by subjective account).
 - Recurrent thoughts of death (not just fear of dying), a suicide attempt/specific plan for committing suicide, or recurrent suicidal ideation minus a specific plan.
- Symptoms do not meet criteria for mixed episode.
- Symptoms create clinically significant distress/impairment in social, occupational, or other important areas of functioning.
- Symptoms not due to direct physiological effects of substance (e.g., drug abuse) or general medical condition.
- Symptoms not better accounted for by bereavement. They persist in excess of two months and are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation.

Major Depressive Disorder (MDD) can be a single episode or recurrent. Recurrent requires at least two major depressive episodes, with an interval of at least two consecutive months in which criteria are not met for a major depressive episode.

Dysthymic Disorder

- Depressed Mood, most of the day, more days than not, for at least one year in pediatric populations, either by observation by others or by subjective account.
- Presence, while depressed, of at least two of the following:
 - Overeating/poor appetite.
 - Low energy/fatigue.
 - Low self-esteem.
 - Hypersomnia/insomnia.
 - Difficulty making decisions/poor concentration.
 - Feelings of hopelessness.
- The foregoing symptoms have not abated for longer than 2 months at a time during the one-year period.
- No major depressive episode during the first year, which signals that the disturbance is not better accounted for by MDD, either chronic or in partial remission.
- There has never been a manic, mixed, or hypomanic episode, and criteria for Cyclothymic disorder have never been met.
- Disturbance does not occur exclusively in the course of a Psychotic Disorder.
- Symptoms are not due to physiological effects of substance use or a general medical condition.
- Symptoms cause clinically significant impairment or distress in occupational, social, or other important areas of functioning (American Psychiatric Association, 2000).

Typical Differential Diagnosis – Pediatric Depressive Disorders

Anxiety disorders Medical disorders

Posttraumatic stress disorder Chronic fatigue syndrome

Adjustment disorders Personality disorders

Bereavement Eating disorders

Seasonal affective disorder Disruptive disorders

Premenstrual dysphoric disorder Substance abuse disorders

Bipolar disorder Sexual identity and orientation issues

Comorbidity of MDD

- MDD shows substantial comorbidity with a lot of psychiatric disorders, especially anxiety, conduct, and eating disorders. In fact, the commonness of the comorbility is generally regarded as the rule rather than the exception.
- Nearly six in 10 youth with MDD have at least two additional disorders. It has been shown that the presence of depression in young people increases the probability of another disorder 20-fold.
- For adolescents, the most common comorbidity with MDD includes anxiety, conduct, and substance use disorders.
 - Between one fourth to three fourths of cases had anxiety disorders;
 - From 21 percent to 50 percent had conduct disorders; and
 - Almost one fourth had substance abuse disorders.

Source: Essau & Chang, 2009.

In both clinic and community samples of children and adolescents, depression is associated with significant comorbidity (Angold, Costello, & Erkanli, 1999; Essau, Conradt, & Petermann, 2000). In the Oregon Adolescent Depression Project (OADP) (Lewinsohn et al., 1998), 43 percent of the adolescents with MDD also had a lifetime occurrence of another mental disorder.

For clinical samples of children and adolescents, the most common comorbid diagnosis with depression was an anxiety disorder, particularly GAD (55 percent), phobias (45 percent), and separation anxiety disorder (nine percent) (Birmaher et al., 1996; Simonoff, et al., 1997). Indeed, anxiety disorders may serve as a risk factor for depression (Garber & Weersing, 2011). A meta-analysis of studies of community samples of children and adolescents revealed that the odds ratios for comorbid disorders with MDD were 8.2 for anxiety disorders, 6.6 for conduct/oppositional defiant disorders, and 5.5 for ADHD (Angold et al., 1999).

Impairment in cognitive and social functioning in individuals with MDD may be intensified by comorbid conditions (Biederman, et al., 2008; Fergusson & Woodward, 2002; Rudolph & Clark, 2001). For example, depressed adolescents with ADHD have been found to be at increased risk for longer episode duration, a higher rate of suicidality, and a greater likelihood of needing psychiatric hospitalization (Biederman et al., 2008).

Symptoms/Impairments in Pediatric Depression

Symptoms of depression in children and adolescents can vary in length and degree. Parents, caregivers, educators, and other significant persons in the lives of children should be aware of the following signs, symptoms, and associated impairment consistent with possible depression:

Signs and Symptoms

- Persistent sadness or hopelessness.
- Irritability, anger, and rage
- Changes in eating and/or sleeping habits.
- Withdrawal from friends and activities once enjoyed.
- Lack of enthusiasm, interest, or motivation
- Moving or talking very slowly; or very agitated, moving all the times.
- Difficulty making decisions, lack of concentration or forgetfulness.
- Low self-esteem or guilt.
- Thoughts or expressions of death or suicide

Impairment

- Hypersensitivity to criticism or rejection.
- Frequent physical complaints (e.g., headaches and stomachaches).
- Drug and/or alcohol abuse.
- Poor school work.
- School absences
- Problems with authority figures.
- Increase in difficulties getting along with others (Public School Parent's Network, 2003).

Although the presence of one of the above symptoms does not necessarily signal clinical depression, the presence of several symptoms occurring around the same time may be a cause for concern and suggest that further evaluations may be warranted (Cash, 2004).

Screening/Evaluation – Depression

Age appropriate assessment of depressive symptoms is a key initial step in the treatment process. Obtaining information from multiple informants and using a variety of assessment methods including clinical interviews, questionnaires, and behavioral observation will provide a more comprehensive evaluation needed to make accurate diagnoses and treatment plans. Even when information from multiple sources is available, getting report directly from the child or adolescent is essential; parents often are unaware of their child's inner experiences and therefore may be less accurate reporters about their child's subjective distress (Ferdinand, van der Ende, & Verhulst, 2004).

Depressive disorders in children and adolescents often are under-diagnosed and under-treated. Younger children (ages 6-7 for purposes of these guidelines) are less able to convey their internal mood state and may present with more somatic complaints (e.g., headaches and stomachaches. Recently, however, evidence of diagnosed depression in preschool-aged children has been reported (e.g., Luby, 2009).

Recognition and treatment of depression are especially important in primary care settings because for most children and adolescents, their primary care provider may be the only health professional seen within the course of a year. A study conducted in a primary care setting found that 20 percent of youth met criteria for a depressive disorder (Yates, Kramer & Garralda, 2004)

With this consideration, the recommended first step in diagnosing depression involves physicians ruling out medical conditions, medications, or their combination. Hence, the first step is a physical examination, and electrolytic and metabolic assessment. Physicians also may choose to screen youth for depression using the Children's Depression Inventory (CDI) for ages 7-17 (Bhatia & Bhatia, 2007) or the Center for Epidemiologic Studies Depression Scale Modified for Children (CES-DC) [NIMH, 2001]. (*A copy of CES-DC is found in Appendix C of this document.*) A score of 16 or above on the CDI long form or of 7 on the short form is clinically significant. On the CES-DC, total scores of 16-23 indicate mild depression, 24-30, moderate depression, and scores over 30 reflect more severe levels of depression (Roberts & Chen, 1995).

Positive scores on any screening instruments may signal the need for a more comprehensive evaluation by a Mental Health professional. Gathering information for a complete history of symptoms, conducting interviews with the young person, his/her parents or caregivers, exploration of family psychiatric history, and whenever possible, obtaining information from other informants such as teachers and social services workers likely will be useful during the assessment process. Questioning the young person about alcohol and drug use, and thoughts about death or suicide is critical. This assessment information and the young person's mental status examination [to evaluate any effects from the depression on speech, thought patterns, or memory (NIMH, 2001)], are critical to making a diagnosis and developing a treatment plan for the constellation of mood symptoms at that specific episode in the young person's life.

Treatment - Depression

Treatment Planning

Multimodal treatment plans may help with the high degree of comorbidity and the severity of the psychosocial and academic consequences associated with depression. It is important to develop a treatment plan that is appropriate for the developmental stage of the child or the adolescent while providing safe and effective treatment services in the least restrictive environment.

Acute Treatment

Factors to consider when selecting the initial treatment(s) include: Chronicity

- Severity and number of prior episodes
- Previous response to treatment
- Age of the child
- Compliance with treatment
- Child's and family's motivation for treatment
- Extent of psychopathology in the parent(s)

Contextual issues

Family Education

Youth and their caregivers should be taught about the disorder and the treatment involved. Family education involves family members as informed partners in the treatment team. It helps for them to understand that depression is a treatable condition, and to identify patterns of behaviors and associated psychosocial concerns. Supportive involvement of family members may help the young person appreciate the importance of compliance with treatment.

Psychotherapy

Treatment must take into account the severity of depression, developmental stage, suicidality, and social and environmental factors (Clark, Jansen, & Cloy, 2012). The majority of the psychotherapy trials for depression in children and adolescents have evaluated the efficacy of various forms of cognitive-behavioral therapy (CBT), and some have used interpersonal therapy (IPT) or family therapy (Kaslow & Thomson, 1998). Both CBT and IPT are recommended treatments for young people with mild depression. These two psychotherapies further are appropriate adjuvant treatments to medication in young people with moderate to severe depression (Clark, Jansen, & Cloy, 2012).

Cognitive-Behavioral Therapy (CBT) aims to help individuals identify and modify negative thought patterns, realistically evaluate the accuracy of their beliefs, and develop problem-solving and coping skills (Beck, Rush, Shaw, & Emory, 1979). There have been 14 randomized studies of some form of CBT with depressed youth: four in clinically referred samples, four in diagnosed community samples, and six in symptomatic but not diagnosed community samples.

CBT holds that cognitive distortions contribute to depression, and teaches youth to identify and counteract these negative beliefs. CBT is most efficacious with mild to moderate depression. Clinical studies have found high rates of relapse upon follow-up, however, suggesting the need for continuation treatment in individuals with more severe depression (NIMH, 2001). Research supports combination treatments for severe and recurrent depressive episodes (NIMH, 2007; Treatment for Adolescents with Depression [TADS] Team, 2004). CBT aims to promote self-esteem, coping skills, adaptive strategies, and improved peer and family relationships. The combination of CBT with antidepressant medications has been shown to be effective in reducing depression in adolescents (TADS Team, 2004).

IPT is a brief, time limited psychotherapy which assumes that the quality of interpersonal relationships can cause, maintain, or buffer against depression. Treatment with IPT involves three phases: initial, middle, and termination. The initial phase focuses on diagnosing the disorder, providing psychoeducation, exploring the youth's significant relationships with peers and family members, and identifying the problem area that will be the focus of remaining treatment. In the middle phase, the therapist educates youth about the connection between his/her mood and problems that are occurring in relationships. The youth also learn ways that

new communication and problem-solving skills can improve relationships, thereby leading to recovery from depression. The therapist focuses on identifying specific strategies to help the youth negotiate his/her interpersonal difficulties more successfully. Finally, the termination phase serves to clarify warning signs and symptoms of future depressive episodes, identify successful strategies from the middle phase, foster ways to generalize newly learned skills to future situations, emphasize mastery of new interpersonal skills, and discuss whether further treatment is warranted (EffectiveChildTherapy.com, n.d.).

Pharmacotherapy

The combination of pharmacotherapy (medications) and CBT are recommended for the treatment of MDD in youth, especially when depression is moderate to severe. Fluoxetine may be the initial drug of choice in this combination therapy (Tom-Revzon & Lee, 2006). A more specialized treatment with *medications should be considered as first-line treatment for more difficult youth cases* such as those with severe or psychotic symptoms, when psychotherapy is not appropriate or available, and youth with chronic or recurring episodes (NIMH, 2001). The use of specialized medications should involve Mental Health professionals as consultants or as primary caregivers as special care should be given to children and adolescents prescribed medicines with more chronic or complex symptom and family history. Some psychiatric medicines contain "*BLACK BOX*" warnings because they have been linked to increased suicidality in youth. Patients and parents should be educated about such risks and instructed to contact the physician and/or mental health professional if any suicidal ideation is experienced, particularly early in treatment or at any point such ideation occurs (American Psychiatric Association and American Academy of Child & Adolescent Psychiatry, 2005).

<u>Table of Typically Prescribed Pediatric Medications – Depression</u>

Benefits: Useful in treating depression. Most of the medications on the list are in the category of SSRI (Specific Serotonin Reuptake Inhibitors) that affect the neurotransmitter Serotonin.

Side Effects: Possible appetite changes, nausea, headache, sweating, insomnia and occasionally

tiredness, sexual problems including desire.

MEDICATION NAME		NOTES		
Brand Name	Generic Name			
1. Prozac / Serefam	Fluoxetine	Fluoxetine is the only medication that carries FDA approval in the treatment of depression in children (NIMH, 2007). It has been approved in the treatment of pediatric patients as young as eight years of age. Keep the maximum dosage no higher than 20 mg/day (Texas Department of Family and Protective Services, 2010).		
2. Lexapro	Escitalopram	Lexapro has been approved for use in adolescents (ages 12-17) with depression. Keep the maximum dosage no higher than 20 mg/day (Mayo Clinic, 2012; Texas Department of Family and Protective Services, 2010).		
3. Zoloft	Sertraline	Not approved for use in pediatric patients with depression (Texas Department of Family & Protective Services, 2010). Use and dosage should be based on clinical need and determined by the prescriber (Mayo Clinic, 2012).		
4. Luvox	Fluvoxamine	Not approved for use in pediatric patients with depression (Texas Department of Family & Protective Services, 2010). Use and dosage should be based on clinical need and determined by the prescriber (Mayo Clinic, 2012).		
5. Paxil/ Paxil CR	Paroxetine	Not approved for use in pediatric patients with depression (Texas Department of Family & Protective Services, 2010). Use and dosage should be based on clinical need and determined by the prescriber (Mayo Clinic, 2012).		
6. Celexa	Citalopram	Not approved for use in pediatric patients with depression (Texas Department of Family & Protective Services, 2010). Use and dosage should be based on clinical need and determined by the prescriber (Mayo Clinic, 2012).		
7.Effexor XR	Venlafaxine	Not approved for use in pediatric patients with depression (Texas Department of Family & Protective Services, 2010). Use and dosage should be based on clinical need and determined by the prescriber (Mayo Clinic, 2012).		
8. Cymbalta	Duloxetine	Not approved for use in pediatric patients with depression (Texas Department of Family & Protective Services, 2010). Use and dosage should be based on clinical need and determined by the prescriber (Mayo Clinic, 2012).		
9. Pristiq	Desevenlafaxine	Not approved for use in pediatric patients with depression (Texas Department of Family & Protective Services, 2010). Use and dosage should be based on clinical need and determined by the prescriber (Mayo Clinic, 2012).		

<u>NOTE</u>: There are black box warnings on all antidepressant medications, especially related to suicidal ideation. As a precaution, all patients receiving antidepressant therapy should be carefully monitored and closely observed for clinical worsening, suicidality, or unusual changes in behavior (Texas Department of Family & Protective Services ..., 2010).

Treatment Considerations and Duration

<u>BEFORE</u> beginning antidepressant therapy with young people, prescribers should ensure that a safety plan is in place. The safety plan is an agreement with the youth and his/her family that the

patient will be kept safe and will contact a responsible adult if suicidal thoughts are too strong. Also included in this plan is assurance of that the treating prescriber or his/her proxy will be available 24 hours a day to manage emergencies.

Treatment duration is dependent upon the number of previous episodes of depression. At least six months of treatment is recommended in first episodes, with slow tapering of the drug over a six-to-eight week period to minimize risk of withdrawal syndrome. At least one year of treatment should be given for second episodes of depression. When there have been two or three episodes, treatment might last up to three years. More extensive treatment is recommended for pediatric patients with more than three previous episodes of depression, especially if the episodes are severe, involve suicidality, or have psychotic features.

Use the dosage at which symptom relief occurs as the dosage for maintenance. Family therapy and/or adjunctive psychotherapy can help consolidate gains. No optimal treatment duration for therapy has been established.

A child psychiatric consultation will be helpful for children with treatment-resistant depression or severe recurrent depression. Prescribers who are uncomfortable prescribing complex therapies should consider referral to a child psychiatrist, particularly if the patient has multiple comorbidities (Bhatia & Bhatia, 2007).

Prevention - Depression

Lifestyle strategies should be incorporated as much as possible on the front end as part of prevention as they are a part of treatment for depression. Such strategies include:

- Regular exercise
- A healthy, balanced diet
- Regular and sufficient sleep
- No alcohol, tobacco, or drugs
- Limit caffeine use
- Family education about the disorder (Bryson, 2005).

Youth with subclinical depressive symptoms are at high risk to develop clinical depression. When these symptoms persist after an episode of depression, continued treatment until full remission is recommended. For youth who have not had an episode of depressive symptoms of full duration or severity to be sufficient for clinical depression consideration, psychosocial interventions to reduce environmental and family stressors and CBT strategies appear to be efficacious to prevent the development of a full depressive disorder.

Children with depressive symptoms are at increased risk of having a first episode of MDD within a few years after onset of initial depressive symptoms. Thus, early intervention with mild to moderate depressive symptoms may decrease the likelihood of the onset of a full depressive episode. Early intervention with depressed youth also may reduce the chances of developing comorbid problems such as substance use disorders.

<u>Bibliotherapy – Depression</u>

The Children's Hospital & Regional Medical Center – Seattle (2004) lists the following three books about depression as resources for children to read:

- *Taking Depression to School*, Kathy Khalsa, 2002. A story in which a girl tells her classmates what life is like for her living with depression.
- *Tiger's Fall*, Molly Garrett Bang, 2001. A little girl becomes physically disabled as the result of an accident. She learns that her disability cannot limit her ability to make a difference.
- Where's Your Smile, Crocodile? Clair Freedman, 2001. A boy who visits with his friends from the jungle is the main character in this book. Through his visits, he learns important lessons about feelings and helping others.

Parents may gain knowledge and strength from the following books (Children's Hospital & Regional Medical Center – Seattle (2004):

- *The Childhood Depression Sourcebook*, Jeffery Miller, 1998. Provides useful insight and knowledge about why children get depressed, how to identify signs and symptoms, and where to find appropriate treatment.
- The Depressed Child: Overcoming Teen Depression, Mariam Kaufman, 2001. Guides parents/caregivers through the signs and symptoms of depression, what the illness is, and how it can be overcome.

Bipolar Disorder (BD)

(<u>NOTE</u>: The new DSM-5 will split the Mood Disorders chapter into two sections: Depressive Disorders and Bipolar and Related Disorders [Bradley, n.d.].)

Prior to diagnosis of BD, criteria must be met for a major depressive episode and a manic episode (DSM-IV-TR, 2000).

Manic Episode

- A distinct period of abnormally and persistently elevated, expansive, or irritable mood that lasts at least a week.
- At least three of the following symptoms persist and have been present to a significant degree during the mood disturbance period (four symptoms, if mood is irritable).
 - Inflated self-esteem/grandiosity.
 - Decreased need for sleep.
 - More loquacious than usual or pressured to keep talking.
 - Flight of ideas or subjective experience that thoughts are racing.
 - Distractibility.

- Increase in goal-directed activity, or psychomotor agitation.
- Excessive involvement in pleasurable activities that have a high potential for painful consequences.
- Symptoms do not meet criteria for mixed episode.
- Mood disturbance is sufficiently severe to cause marked impairment in occupational functioning, usual social activities, or relationships with others, or to necessitate hospitalization to prevent harm to self or others, or there are psychotic features.
- Symptoms not due to direct physiological effects of substance or general medical condition.

Manic or hypomanic episodes lend themselves to a diagnosis of Bipolar Disorder I or II, respectively. The manic episode should not be better accounted for Schizoaffective Disorder, and should not be superimposed on Schizophrenia, Schizophreniform Disorder, Delusional Disorder, or Psychotic Disorder Not Otherwise Specified (American Psychiatric Association, 2000). (Note: Manic-like episodes clearly caused by somatic antidepressant medication should be assessed without antidepressant treatment and may not meet the criteria for diagnosis of Bipolar I Disorder [American Psychiatric Association, 2000]).

A child with BD can express extreme, explosive anger that may be triggered when a parent/other authority figure attempts to set limits. The destruction that occurs is most likely intentional. Additionally, some youth with BD have an accompanying psychosis (Frank, 2006).

It is recommended that clinicians use the FIND strategy to determine the presence or absence of manic symptoms. FIND stands for frequency, intensity, number, and duration. For *frequency*, the symptoms must manifest most of the days during a week. *Intensity* means that the symptoms are so severe that at least one domain of functioning is significantly affected. If the manic symptoms are mild to moderate then at least two domains of functioning must be affected. *Number* means that the symptoms occur at least 3-4 times a day. Finally, *duration* relates to the length of time the symptoms occur. The standard is at least 4 hours a day, which do not have to be consecutive (Kowatch et al., 2005).

New DSM-5 Changes to Bipolar Classification

Besides becoming a separate section in the DSM-5 titled "Bipolar and Related Disorders" (Bradley, n.d.), a new disorder will be added to the section. Disruptive mood dysregulation disorder will be included to diagnose young people who show frequent episodes of behavior outbursts at least three times a week and persistent irritability for longer than a year (Gever, 2012; Grohol, 2012). Adding this diagnosis has the intent of addressing concerns about potential overdiagnosis and overtreatment of bipolar disorder in children and adolescents, hence reducing the number of young people that have a BD diagnosis.

Typical Differential Diagnosis for Pediatric Bipolar Disorder

Major depressive disorder Disruptive disorders Attention deficit hyperactivity disorders Psychotic disorders

Personality disorders Seasonal affective disorder

Adjustment disorders and bereavement

Premenstrual dysphoric disorder

Pervasive developmental disorder Posttraumatic stress disorder

Anxiety disorders

Substance abuse disorders

Eating disorders
Medical disorders

Sexual identity and orientation issues

Youth with bipolar disorder are at extremely high risk for suicidal ideation, intent, plans, and attempts, during depressed or mixed episodes or when psychotic (Kowatch et al., 2005).

Comorbidity of Bipolar Disorder

Many young people with bipolar disorder are also diagnosed with attention deficit hyperactivity disorder (ADHD) (Frank, 2006; Lansford, 2004) or comorbid conduct disorder (Brown, 2002-2003). Differentiating among these various diagnoses often is difficult and controversial (Galanter & Leibenluft, 2008).

Screening/Evaluation - Bipolar Disorder

Bipolar is difficult to diagnose in children and early adolescents, in part because children lack the capacity to manifest many of the symptoms that show up in adults. Nevertheless, Geller (1998) identified five symptoms that will help in correctly diagnosing childhood bipolar disorder. They are grandiosity, flight of ideas or racing thoughts, decreased need for sleep, elation, and hypersexuality. In late adolescence, as many as 50 percent with bipolar disorder have been misdiagnosed as either conduct disorder or schizophrenia (Lansford, 2004).

Screening and evaluation for bipolar disorder in children and adolescents should involve procedures very similar to those used to identify depression. A thorough physical examination, metabolic and electrolytic evaluation and a diagnostic evaluation should be completed. At the very least, the youth and one parent should be interviewed, though both parents are preferable. The interview should be conducted by a specialized clinician that is knowledgeable about young people and mood disorders. Information should come from multiple sources, including teachers, coaches, afterschool care providers, peers, etc. Medical records also provide very useful information. The youth's medical history can help rule out physical conditions that may mimic bipolar symptoms. School input will be important during the initial evaluation and after treatment progresses (Kowatch et al., 2005).

During the evaluation, the clinician should establish a timeline that reflects the unfolding of the disorder and comorbid conditions over time. All "BAMO" (behavior, anxiety, mood, and other) symptoms should be included in the timeline. A fourth grade child, for example, could be asked whether any *echappellTDMHSASResearchTeam* 02/25/2013 Page / 220

symptoms were present in 2nd or 3rd grade. If the clinician suspects illegal drug use, a drug screen should be ordered. If symptoms appear to have been triggered by a prescription drug use, a seven-to-ten-day "washout" period should be instituted. If symptoms persist following the washout period, a diagnosis of bipolar disorder should be considered. The evaluation should also include an assessment of suicidal thinking and/or attempts because suicidal behaviors are more common in persons with bipolar than in most any other pediatric psychiatric disorder (Kowatch et al., 2005).

Current symptom information is as important as gathering data about symptoms over time. Collecting family history information will help the clinician establish any genetic connection. Research has shown that children whose parents have the disorder are two to three times more likely to develop the disorder themselves (Kowatch et al., 2005).

Treatment - Bipolar Disorder

Psychosocial/Psychotherapeutic interventions

Psychotherapy can be an effective adjunctive treatment in depressed youth with or at risk for BD. Various psychotherapeutic approaches, including cognitive-behavioral therapy (CBT), dialectical-behavioral therapy (DBT) and family therapy, are beginning to be found to be efficacious in pediatric BD (Chang, 2009; The Balanced Mind Foundation, 2012).

In an open study of DBT in 10 adolescents with BD, depressive symptoms and suicidal ideations and behaviors decreased significantly over 1 year (Goldstein et al., 2007). DBT is particularly recommended when there is suicidal ideation or behaviors (Kowatch et al., 2005).

In a small controlled study of CBT for adolescents with BD, significant decreases in parent and child reported depressive symptoms were reported in the CBT condition. However, compared with BD youth who did not receive CBT, there were no differences in post-treatment depression scores by clinician assessment (Feeney et al., 2006). These individual therapy approaches show promise and should be considered when deciding about treatments alternatives for children with bipolar disorder.

A recent study of adolescents with BD found that family-focused therapy (FFT) was more effective than a series of psychoeducational sessions ("enhanced care" or EC) (Miklowitz, et al., 2008). Adolescents receiving FFT recovered faster from their baseline depressive symptoms and spent fewer weeks in depression than did those receiving EC. FFT was not more effective than EC in preventing relapse of depressive episodes. Thus, depression in the context of BD in youth may be particularly responsive to psychotherapeutic interventions, potentially more so than in pediatric patients with symptoms of mania.

Overall, common themes of these interventions are psychoeducation, behavioral and cognitive interventions, including reducing stress and improving coping strategies, and mood regulation techniques.

Psychosocial therapies such as CBT are generally recommended to treat the comorbid disorders that accompany the bipolar disorder. CBT or IPT often is used when the comorbid condition is depression, anxiety, or OCD. Family focused therapy (FFT) can be effective when substance use disorder is comorbid. Psychotherapy in the form of dialectic behavior therapy (DBT), if available, should be considered in the event of ongoing suicidality (Kowatch et al., 2005). A good treatment plan for bipolar echappelITDMHSASResearchTeam

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disorder incorporates medication (pharmacotherapy), multifamily psychoeducational groups for the youth, family peer support for parents/caregivers, and accommodations at school in addition to psychotherapy (Lansford, 2004).

Treatment for Comorbidity

Most of the children with bipolar disorder additionally have at least one coexisting disorder (comorbid). Comorbid factors are frequently associated with non-response or poor response to treatment and should be explored whenever a youth does not respond to treatment (Kowatch et al, 2005). The symptoms of bipolar disorder should be stabilized in advance of treating the comorbid condition(s). Each comorbid condition should be treated sequentially, that is, one at a time, but only after the bipolar disorder has been adequately treated. Any medications should be introduced one at a time, whenever possible, so that benefits and side effects of each agent can be adequately monitored.

When a comorbid disorder is confirmed, the treatment plan must be modified to handle treatment of each disorder. It is likely that a number of combination trials of medications and psychotherapy will be necessary for successful outcomes. It is still important, however, that the bipolar symptoms be stabilized first (Kowatch et al., 2005).

Pharmacotherapy

Beginning with medications typically utilized in youth and/or those with FDA approval. noting that approval is associated with short-term treatment (FDA, 2007). A list of initial medications for consideration is shown below in the *Table of Typically Prescribed Medications – Bipolar Disorder*.

Monotherapy is an initial goal of pharmacotherapy; however, oftentimes at least two medications may be required for treatment of more severe or complex symptoms associated with Bipolar Disorder, especially when psychosis is one of the additional symptoms contributing to the complexity of the diagnosis. With young people and medication, it is recommended to:



Source: The Balanced Mind Foundation, 2012.

Table of Typically Prescribed Pediatric Medications for Bipolar Disorder*

Benefits: Useful in treating symptoms of bipolar disorder

Side Effects: Possible excessive thirst, frequent urination, mild gastrointestinal discomfort, acne, weight gain, sedation and possible fine motor tremors (associated with list #4-8).

MEDICATIO	N NAME	NOTES	
Brand Name	Generic Name		
1. Eskalith/ Lithobid	Lithium	FDA approved for pediatric use in youth ages 12 and up.	
		(NIMH, n.d.; Yan, 2007).	
2. Risperdal	Risperidone	FDA approved for use in pediatric patients ages 10 to 17	
		(FDA, 2007; Yan, 2007).	
3. Abilify	Aripiprazole	FDA approved for use in pediatric patients ages 10 to 17	
		(PsychCentral, 2008).	
4. Zyprexa	Olanzapine	FDA approved for use in pediatric patients ages 13 to 17	
		(Pendulum.org, 2009; PsychCentral, 2009).	
5. Seroquel	Quetiapine	FDA approved for use in pediatric patients ages 10 to 17	
		(PsychCentral, 2009).	
6. Depakote	Valproic acid	Not FDA approved for pediatric use (NAMI, 2010). Also has a "black box" warning for pancreatitis and liver failure (Wegmann, 2009).	
7.Tegretol/Carbatrol	Carbamazepine	Not FDA approved for pediatric use (Rutledge, n.d.).	
8. Trileptal	Oxcarbazepine	<i>Not FDA approved for pediatric use</i> . Studies have not shown its use to be significantly superior to placebos in the treatment of bipolar in young people (Purse, 2010).	
9. Lamictal	Lamotrigine	It is not known if this medication is effective or safe in children or adolescents younger than 18 years of age with mood disorders such as depression or bipolar disorder (FDA, 2012).	

^{*}At the time of this writing, there are no FDA-approved medications for the treatment of bipolar disorder under the age of 10 years.

Treatment Duration:

Initial medication	At least four weeks	Up to six weeks if improvement noted in four weeks
Continuation therapy	At least six months	Longer if remission does not occur within six months
Maintenance therapy (1-3 years)	If youth has multiple or severe episodes of mood instability or suicidality	If youth is at high risk for recurrence

^{*}Content adapted from *Guide to Psychiatric Medications for Children and Adolescents* by Glenn Hirsch, M.D., at www.AboutOurKids.org and various US Food and Drug Administration (FDA) website on medication use with children and adolescents. However, content was primarily based on *Psychotropic Medication Utilization Parameters for Foster Children* (2010), as developed by the Texas Department of Family Protective Services and the University of Texas at Austin College of Pharmacy. Various FDA resources served as secondary sources.

<u>Precautions – Bipolar Disorder</u>

Effort to adequately diagnose bipolar disorder in youth whether as a child or adolescent is critical, but complex. It is important to note that using antidepressant medication to treat bipolar disorder may induce manic symptoms if antidepressant is used without a mood stabilizer. However, due to the progression of Bipolar Disorder the initial mood presentation may be depressive in nature, contributing to the diagnostic complexity of these cases. Collaboration between the pediatrician (oftentimes the original clinician to evaluate the symptoms) and the psychiatrist, especially Child and Adolescent Psychiatrist is an important step in the diagnosis and treatment of youth with Bipolar disorder. Physicians should educate families on the signs and symptoms of mania. The family is critical to the appropriate treatment of the youth and will assist with adherence to treatment. The family can report changes immediately to the physician resulting in appropriate treatment changes. (NIMH, 2001).

<u>Prevention – Bipolar Disorder</u>

Strategies that persons with bipolar disorder can use to prevent recurrences or reduce the existing symptoms include:

- Getting regular exercise.
- Eating a healthy diet.
- Getting adequate and regular sleep.
- Keeping to a regular schedule.
- Developing personal support systems, involving family and friends (Segal, de Benedictis, & Segal, 2007).

Bibliotherapy – Bipolar Disorder

There are several good books for children and adolescents with bipolar disorder. One of them focuses on siblings so they can learn about the disorder and how to best get along with their brother or sister.

- *The Storm in My Brain*. Child & Adolescent Bipolar Foundation (CABF), 2003. A booklet, created by young people with the disorder that speaks to other youth about how it feels to have a mood disorder.
- Anger Mountain. Hannah & Hebert, 2005. The book features an elementary school-age child who is dealing with significant anger issues. It gives youth hope, support, and strategies for coping with the disorder.
- My Bipolar Roller Coaster Feelings Book & Workbook. Hebert & Hannah, 2005. The book is written from the perspective of a young man who suffers from bipolar disorder. It is a great resource for other youth with the disorder, their family, friends, and significant others.
- *Turbo Max: A Story for Siblings of Bipolar Children*. Anglada, 2002. For siblings 8-12 years old. The boy's summer diary describes his journey with his sister's disorder, which culminates with his acceptance of her illness.
- *Matt the Moody Hermit Crab*. McGee, 2003. A young man undergoes onset, diagnosis, and treatment of bipolar disorder. It is designed for young people ages 8-12 (grades 4-7). *Source: Amazon.com*, 2007.

References

Amazon.com (2007). Retrieved from www.Amazon.com.

- American Academy of Children & Adolescent Psychiatry (AACAP). (1998). Practice parameters for the assessment and treatment of children and adolescents with depressive disorders. *Journal of the American Academy of Child & Adolescent Psychiatry*, 37(10), 63S-83S.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., Text Revision). Washington, DC: American Psychiatric Association.
- American Psychiatric Association & the American Academy of Child & Adolescent Psychiatry (APA & AACAP). (2005). The use of medications for the treatment of depression in children and adolescents: Information for patients and their families. Retrieved from http://www.ParentsMedGuide.org.
- Bhatia, S.K. & Bhatia, S.C. (2007). Childhood and adolescent depression. *American Family Physician*, 75(1), 73-80.
- Brown, A.B. (2002-2003, Winter). Why is bipolar disorder often under-diagnosed in children? *NARSAD Research Newsletter*, 1-6.

- Bryson, S.J. (2005). *Depression in childhood and adolescence: Treatment overview on Yahoo! health.* Retrieved from http://health.yahoo.com/topic/depression/treatment/article/healthwise/ty4655.
- Carlson, G. A. (2012). Differential diagnosis of bipolar disorder in children and adolescents. *Official Journal of the World Psychiatric Association (WPA)*, 11, 146-152.
- Carlson, G.A., Naz. B., & Bromet, E.J. (2005). Phenomenology and assessment of adolescent-onset psychosis: observations from a first admission psychosis project. In R.L. Findling & S.C. Schultz (Eds.), *Juvenile onset schizophrenia* (pp. 1-38). Baltimore: Johns Hopkins University Press.
- Cash, R.E. (2004). Depression in young children: Information for parents and educators. In A.S. Canter, L.Z. Paige, M.D. Roth, I. Romero, & S.A. Carroll (Eds.). *Helping children at home and school II: Handouts for families and educators*. Bethesda, MD: NASP Publications.
- Chang, K. (2009). Challenges in the diagnosis and treatment of pediatric bipolar depression. *Dialogues in Clinical Neuroscience*, 11, 73-80.
- Children's Hospital & Regional Medical Center-Seattle. (2004). Depression in children and adolescents booklist and resources. Retrieved from http://www.seattlechildrens.org/child_health_safety/pdf/flyers/CE441.pdf.
- Clark, M.S., Jansen, K.L., & Cloy, L. (2012). Treatment of childhood and adolescent depression. *American Family Physician*, 86(5).
- Colorado Department of Education (CDE). (2006). Evidence based practices in school mental health: Depression. Denver: CDE, Exceptional Student Services Unit.
- Compas, B.E., Forehand, R., Keller, G., Champion, J.E., Rakow, A., Reeslund, K.L., et al. (2009). Randomized controlled trial of a family cognitive-behavioral preventive intervention for children of depressed parents. *Journal of Consulting and Clinical Psychology*, 77, 1007-1020.
- DelBello, M.P., Adler, C.M., Whitsel, R.M., Stanford, K.E., & Strakowski, S.M. (2007). A 12-week single-blind trial of quetiapine for the treatment of mood symptoms in adolescents at high risk for developing bipolar I disorder. *Journal of Clinical Psychiatry*, 68, 789-795.
- Essau, C.A., & Chang, W.C. (2009). Epidemiology, comorbidity, and course of adolescent depression. In C.A. Essau (Ed.), *Treatment for adolescent depression: Theory and practice*. New York: Oxford University Press.
- EffectiveChildTherapy.com. (n.d.). Interpersonal psychotherapy for depression. Retrieved from http://effectivechildtherapy.com/content/interpersonal-psychotherapy-depression.
- FDA. (2007, August 22). Drug approved to treat two psychiatric conditions in children and adolescents. Retrieved from http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm048733.htm.
- FDA. (2012, July 23). Lamictal medication guide FDA. Retrieved from http://www.fda.gov/downloads/Drugs/DrugSafety/UCM152835.pdf.

- Feeny, N.C., Danielson, C.K., Schwartz, L., Youngstrom, E.A., & Findling, R.L. (2006). Cognitive-behavioral therapy for bipolar disorders in adolescents: A pilot study. *Bipolar Disorder*. 8(5 Pt 1), 508-515.
- Findling, R.L., Frazier, T.W., Youngstrom, E.A., McNamara, N.K., Stansbrey, R.J., Gracious, B.L., ... Calabrese, J.R. (2007). Double-blind, placebo controlled trial of divalproex monotherapy in the treatment of symptomatic youth at high risk for developing bipolar disorder. *Journal of Clinical Psychiatry*, 68(5), 781-788.
- Frank, C. (2006) *Is it ADHD or bipolar disorder*? Retrieved from http://www.webmd.com/bipolar-disorder? Retrieved from http://www.webmd.com/bipolar-disorder? Retrieved from http://www.webmd.com/bipolar-disorder? Retrieved from http://www.webmd.com/bipolar-disorder? Retrieved from http://www.webmd.com/bipolar-disorder? Retrieved from http://www.webmd.com/bipolar-disorder.
- Fraser-Thill, R. (n.d.). Moodiness in tweens: When is moodiness normal and when is it problematic? Retrieved from http://tweenparenting.about.com/od/physicalemotionalgrowth/a/Moodiness-and-Tweens.htm.
- Galanter, C.A., & Leibenluft, E. (2008). Frontiers between attention deficit hyperactivity disorder and bipolar disorder. *Child & Adolescent Psychiatry Clinics of North America*, 17, 325-46.
- Garber, J., Clarke, G., Weersing, V.R., Beardslee, W.R., Brent, D., Gladstone, T., ... & Iyengar, S. (2009). Prevention of depression in at-risk adolescents: A randomized controlled trial. *Journal of the American Medical Association*. 301, 2215-2224.
- Geller, B., Cooper, T.B., Zimerman, B., et al. (1998). Lithium for prepubertal depressed children with family history predictors of future bipolarity: a double-blind, placebo-controlled study. *Journal of Affective Disorders*, *51*, 165-175.
- Gever, J. (2012, December 1). DSM-5 wins ApA board approval. *MedPage Today*. Retrieved from http://www.medpagetoday.com/Psychiatry/DSM-5/36206.
- Goldstein, T.R., Axelson, D.A., Birmaher, B., & Brent, D.A. (2007). Dialectical behavior therapy for adolescents with bipolar disorder: a 1- year open trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, 46, 820-830.
- Grohol, J. (2012). Final DSM-5 approved by American Psychiatric Association, Psych Central. Retrieved from http://psychcentral.com/blog/archives/2012/12/02/final-dsm-5-approved-by-american-psychiatric-association/.
- Huberty, T.J. (2006). Depression: Helping students in the classroom. *Communique*, *35*(3). Bethesda, MD: National Association of School Psychologists (NASP).
- Kennedy, S. (2004). Mood disorders in children and teens: Identifying appropriate medications and treatment is crucial to recovery. *A Pediatric Perspective*, 13(2), 1-4.
- Kowatch, R.A. (2005). Recognition and treatment of bipolar disorder in children and adolescents. Retrieved from http://www,medscape.com/viewprogram/3857 pnt.

- Kowatch, R.A., Fristad, M., Birmaher, B., Wagner, K.D., Findling, R.L., Hellander, M., et al. (2005). Treatment guidelines for children and adolescents with bipolar disorder: Child psychiatric workgroup on bipolar disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 44(3), 213-235.
- Lansford, A. (2004). Bipolar disorder in childhood and adolescence: Recognizing bipolar disorder.
- Mayo Clinic. (2007). Antidepressants for children: Explore the pros and cons. Retrieved from http://www.mayoclinic.com/health/antidepressants/MH00059.
- Merikangas, K. R., & Pato, M. (2009). Recent developments in the epidemiology of bipolar disorder in adults and children: magnitude, correlates, and future directions. *Clinical Psychology: Science and Practice*, 16(2), 121-133.
- Miklowitz, D.J., Axelson, D.A., Birmaher, B., et al. (2008). Family-focused treatment for adolescents with bipolar disorder: results of a 2- year randomized trial. *Archives of General Psychiatry*, 65, 1053-1061.
- NAMI. (2010). Child and adolescent bipolar disorder. Retrieved from http://www.nami.org/Template.cfm?Section=By_Illness&template=/ContentManagement/ContentDisplay.cfm&ContentID=13107.
- National Institute of Mental Health (NIMH). (2001). *Depression in children and adolescents: A fact sheet for physicians*. Retrieved from http://www.athealth.com/Consumer/disorders/ChildDepression.html.
- NIMH. (2005). *Men and depression*. Retrieved from http://menanddepression.nimh.nih.gov/clientfiles/menanddep.pdf.
- NIMH. (2007). *Antidepressant medications for children and adolescents: Information for parents and caregivers*. Retrieved from http://www.nimh.nih.gov/healthinformation/antidepressant_child.cfm.
- NIMH. (2007, September 3). *Rate of bipolar diagnosis in youth rapidly climbing, Treatment patterns similar to adults*. Retrieved from http://www.nih.gov/news/pr/sep2007/nimh-03.htm.
- NIMH. (n.d.). Antidepressant medications for children and adolescents: Information for parents and caregivers. Retrieved from http://www.nimh.nih.gov/health/topics/child-and-adolescent-mental-health/antidepressant-medications-for-children-and-adolescents-information-for-parents-and-caregivers.shtml.
- NIMH. (n.d.). What treatments are available for children and teens with bipolar disorder? Retrieved from http://www.nimh.nih.gov/health/publications/bipolar-disorder-in-children-and-teens-a-parents-guide/what-treatments-are-available-for-children-and-teens-with-bipolar-disorder.shtml.
- Pendulum.org. (2009, December 7). FDA approves zyprexa for bipolar adolescents. Retrieved from http://www.pendulum.org/bpnews/archive/001982.html.

- Pendulum.org. (2009, December 6). FDA approves seroquel for bipolar children and adolescents. Retrieved from http://www.pendulum.org/bpnews/archive/001982.html.
- Psych Central. (2008, May 9). Abilify receives approval for expanded use in children, teens. Retrieved from http://psychcentral.com/news/2008/05/09/abilify-receives-approval-for-expanded-use-in-children-teens/2261.html.
- Psych Central. (2009, December 7). FDA approves Zyprexa for schizophrenia, bipolar disorder in teens. Retrieved from http://psychcentral.com/news/2009/12/05/fda-approves-zyprexa-for-schizophrenia-bipolar-disorder-in-teens/9974.html.
- Public School Parent's Network. (2003). *Depression: A resource guide and information source for parents*. Retrieved from http://www.psparents.net/Depression.htm.
- Purse, M. (2010, February 1). Trileptal medication profile: Bipolar medications library. Retrieved from http://bipolar.about.com/cs/trileptal/a/meds_trileptal.htm.
- Rohde, P., Lewinsohn, P.M., Klein, D.N., Seeley, J.R., & Gau, J.M. (2012). Key characteristics of major depressive disorder occurring in childhood, adolescence, emerging adulthood, and adulthood. *Clinical Psychological Science*.
- Rutledge, R. (n.d.). Dysthymia and bipolar disorder: Treatment options. Retrieved from http://www.netplaces.com/parenting-kids-with-depression/dysthymia-and-bipolar-disorder/treatment-options.htm.
- SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 and 2010. (revised 2012 March). Selected drug use, perceptions of great risk, average annual marijuana initiates, past year substance dependence or abuse, needing but not receiving treatment, and past year mental health measures in Tennessee, by age group: Estimated numbers (in thousands), annual averages based on 2009-2010 NSDUHs. Retrieved from http://www.samhsa.gov/data/NSDUH/2k10State/NSDUHsae2010/NSDUHsaeTN2010.pdf.
- Segal, S., de Benedictis, T., & Segal, R. (2007). *Bipolar disorder: Signs, symptoms, and treatment*. Retrieved from http://www.helpguide.org/mental/bipolar disorder symptoms treatment.htm.
- Singh, M.K., Ketter, T.A., Chang, K.D. (2010). Atypical antipsychotics for acute manic and mixed episodes in children and adolescents with bipolar disorder: A review of efficacy and tolerability. *Drugs*, 70(4), 433-442.
- The Balanced Mind Foundation. (2012, September 24). About pediatric bipolar disorder: Medication. Retrieved from http://www.thebalancedmind.org/learn/library/about-pediatric-bipolar-disorder?page=3#med.
- Tom-Revzon, C. & Lee, B. (2006). Psychotropics in children and adolescents. U.S. Pharmacist.
- Treatment for Adolescents with Depression (TADS) Team. (2004). Fluoxetine, cognitive-behavioral therapy, and their combination for adolescents with depression: Treatment for adolescents with

- depression study (TADS) randomized controlled trial. *Journal of the American Medical Association*, 292(7), 807-820.
- Texas Department of Family and Protective Services and the University of Texas at Austin College of Pharmacy. (2010). *Psychotropic medication utilization parameters for foster children*. Retrieved from http://www.dfps.state.tx.us/documents/Child_Protection/pdf/TxFosterCareParameters_December2010.pdf.
- Turgay, A. (2005). Comorbidity of dysthymic disorders in children and adolescents. *Psychiatric Times*, 22(10).
- Wegmann, J. (2009, October 16). Medicating children with bipolar disorder. *Psychology Today*. Retrieved from http://www.psychologytoday.com/blog/pharmatherapy/200910/medicating-children-bipolar-disorder.
- Yan, J. (2007). Risperidone approved to treat schizophrenia in children. *Psychiatric News*, 42(18), 1. Retrieved from http://psychnews.psychiatryonline.org/newsarticle.aspx?articleid=111213.
- Yates, P., Kramer, T., & Garralda, E. (2004). Depressive symptoms amongst adolescent primary care attenders: Levels and associations. *Social Psychiatry and Psychiatric Epidemiology*, *39*, 588-594.
- Youngstrom, E.A. (2006). Psychological science and bipolar disorder in children and adolescents. *Psychological Science Agenda*. Retrieved from http://www.apa.org/science/about/psa/2006/07/youngstrom.aspx.

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